

ABSTRACT OF THE DISCLOSURE

5 A method and apparatus for interpreting and executing a program may include
accessing a program in memory, parsing the program, generating an intermediate
representation equivalent of the program, and executing the intermediate representation
by accessing the program's library of host objects through an interface to the library. The
program may be a JavaScript program embedded in HTML documents in a browser. The
Web browser is programmed to intercept the JavaScript code and pass execution control
over the program to the interpreter engine developed in Java. The parsing component of
10 the engine validates the JavaScript instructions. The validated instructions are converted
by the code generator component of the engine into an intermediate representation
equivalent in Java code. The interpreter engine accesses the program's library of host
objects through an interface to the library and executes the intermediate representation to
produce the desired results as programmed in the original JavaScript source program.

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